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ABSTRACT

The diagnostic-prescriptive observation checklist is designed to allow the regular classroom teacher to diagnose and prescribe for each child's learning abilities or disabilities in the sensory-motor, perceptual, or language areas. Five to ten observable characteristics and five to eight suggested teaching strategies are listed for each of the following areas: auditory association, auditory and grammatic closure, auditory discrimination, auditory figure-ground perception, auditory memory, directionality/laterality, orientation, spatial awareness, verbal expresseion, visual association, visual closure, visual discrimination, visual figure-ground perception, visual memory, and visual-motor coordination. It is suggested that the child for whom four or more characteristics in one area are checked be diagnosed as experiencing difficulty in that area and an appropriate prescription selected from the teaching strategies be implemented. Examples of observable characteristics listed are poor verbal fluency (auditory association) and difficulty with comparing and classifying information gained from visual materials (visual association). Sample teaching strategies are having the child place cut apart comic strips in correct sequence (visual association) and having him draw and trace increasingly complex designs (visual-motor coordination). The appendix provides definitions of each area. (DB)

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A Diagnostic and Prescriptive Approach to Teaching Through Observation

March, 1974

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PREFACE

The Diagnostic and Prescriptive Approach to Teaching Through Observation has been developed for you, the classroom teacher. It is intended to help you provide your pupils with instructional guidance and a thorough understanding of each of their special needs. Because of the nature of those special needs, you may have found in the past and perhaps are finding still that it is somewhat of an arduous task to provide special testing situations on a daily or even weekly basis, which would assist you in diagnosing each child's learning abilities/disabilities and providing for that child, on the basis of your findings, an appropriate prescription(remedial program) commensurate with his needs.

Throughout the day, however, you do watch and listen and record each child's behavior as he moves through his academics, his classroom responsibilities, and his social interactions with his peers. In other words, you Observe. And throughout the day you develop lessons and activities or Teaching Strategies with your children; experiencing success with some and finding others inappropriate. Successful teaching strategies need to be preserved, to be repeated at another time or to be introduced to another group of children.

This Observation Check-List serves as a personal diagnostic and prescriptive workbook for each child and provides for the observation of his learning characteristics and aids in the selection of teaching strategies related to his specific learning abilities. The learning ability areas found in the check-list are seen to be key areas in the Sensory-Motor, Perceptual and Language development of the child.[1] These areas include:

Auditory Association
Auditory and Grammatic Closure
Auditory Discrimination
Auditory Figure-Ground Perception
Auditory Memory
Directionality/Laterality
Orientation
Spatial Awareness
Verbal Expression
Visual Association
Visual Closure
Visual Discrimination
Visual Figure-Ground Perception
Visual Memory
Visual-Motor Coordination

Definitions for each of the learning ability areas may be found in Appendix B.

The learning abilities presented here by no means represent the complete developmental picture (learning style) for the child. Ability areas dealing with the development of Conceptual Skills,

[1]Bibliographic entries 1-4

Social Skills and Gross-Motor Coordination are equally important but are not included in the Check-List because of time constraints and the thrust of this project.

For each of the ability areas listed, from 5-10 observable characteristics have been developed. In like manner, from 5-8 teaching strategies have been formulated, which when implemented, should aid in developing strengths in the specific ability observed. If four or more characteristics are checked for a particular ability area, the child could be diagnosed as experiencing difficulty and an appropriate prescription, through selection of one or more teaching strategies, could be implemented.

The teaching strategies suggested deal with each ability area in a general way and may be prescribed and implemented for any observable characteristic within that area. In addition many of the strategies may be used to remediate other ability areas as noted.

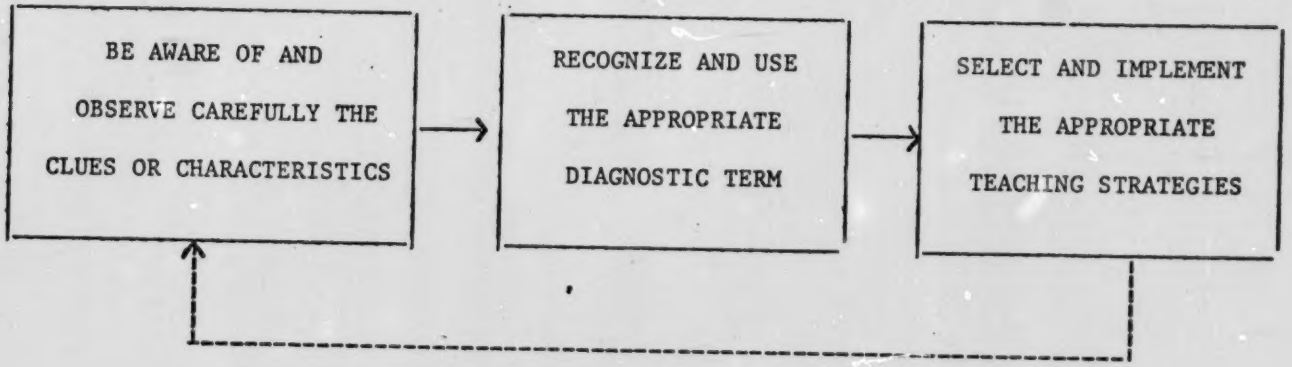
The Check-List is a tool, one of many, designed to help you systematically provide that guidance and thorough understanding which each child is so dependent upon - an understanding of the child's strengths and weaknesses as stimulated by an increased awareness and a guidance that is fostered by the utilization of remedial strategies designed to assist each child toward the successful recognition of his goals.

Each child is unique. He has his own potential, his own goals, his own learning style, and his own liabilities and assets. A learning environment must be created which allows each child the right to learn what he needs to learn in his own way and at his own rate. It is hoped that through the use of this tool, you may be assisted in helping each child to grow in relation to his uniqueness and to become a productive, happy learner.

Sarah M. Anderson

INTRODUCTION

If specific terms are to be used to describe a child's ability to learn, we should be aware of the different clues or characteristics that help us to choose those terms - in other words, to use the terms diagnostically. In addition to understanding the individual characteristics and utilizing the appropriate diagnostic terms to describe the child's learning ability, we need to be aware of the appropriate teaching strategies or prescriptions, which when implemented, will provide the child with an individualized program commensurate with his needs. The figure below and Appendix A serve to illustrate the total process. The text that follows has been developed to assist in the implementation of this process through observation.


BE AWARE OF AND OBSERVE CAREFULLY THE CLUES OR CHARACTERISTICS
RECOGNIZE AND USE THE APPROPRIATE DIAGNOSTIC TERM
SELECT AND IMPLEMENT THE APPROPRIATE TEACHING STRATEGIES

OBSERVATION

CHECK-LIST

OBSERVABLE CHARACTERISTICS

_ Ideas tend to be concrete and concerned with the here and now (the immediate environment).

_ Has difficulty perceiving essential likenesses and differences, even in situations usually perceived as identical or completely different.

_ Cannot adequately sort concepts into categories. Behavior often reflects difficulty with classification and categorization.

_ Limited ability to plan ahead and anticipate consequences and may have difficulty structuring goals.

_ Has difficulty comprehending abstract words such as "joy", "love", "loyalty", etc., and adjectives signifying relationships (big, little; full, empty; short, tall; long, short) quantity (more, less) and directional orientation (up, down; left, right; forward, backward).

_ Tends to have difficulty with concepts involving time and spatial orientation, and body image tends to be distorted or confused.

_ May fail to recognize variations in meaning of words and usually has great difficulty with idiomatic expressions. May comprehend words separately and fail to comprehend words in connected speech.

_ May have difficulty remembering details. Can't retell a story and get across the theme, main idea or moral via speaking, drawing or acting it out (role playing or pantomime).

_ Verbal fluency is poor. May block or have difficulty recalling the necessary words to allow a smooth flow of ideas.

AUDITORY ASSOCIATION

SUGGESTED TEACHING STRATEGIES

...When teaching a child to comprehend nonverbal sounds try one or more of the following techniques:

a. Have children listen for sounds while on their way to school or while on the playground. Then have children imitate and discuss the sounds which were heard. Whenever possible present the concrete source of the sound.

b. Various sounds may be recorded on tape - e.g., animal sounds, household sounds. (The Peabody Language Development Kit ∅P, and others). The teacher may also record common environmental sounds, e.g., traffic, birds, etc. Children match the sounds with object or picture.

c. Play "Who Am I?" One child pretends to be some object or animal and pantomimes while making the appropriate sounds. Often children attempt to identify the object or animal.

...When teaching word meanings try one or more of the following techniques:

a. Start with concrete familiar objects. Select two such objects. Allow children to handle and manipulate each after you present the objects one after the other. Pronounce the name of the object several times while the child is handling and/or looking at it. Then place both objects in front of the child and pronounce one of the nouns. The child is to select or pick up the appropriate object and is encouraged to say the word and use it in a sentence. Associate word label with pictures using the above procedures.

b. Teach body parts-the child's own and those of a doll or picture of a doll. Also teach concepts common to the child's environment: foods, etc. Play the "I wish" game: fill a toy box with toys and then say "I am wishing for a toy that is alive." The child then selects the appropriate toy from the chest. Variations include items other than toys such as fruits, picture of community helpers, etc.

OBSERVABLE CHARACTERISTICS

___ Has difficulty with sequencing and exhibits frequent digressions during oral communication.

AUDITORY ASSOCIATION

SUGGESTED TEACHING STRATEGIES

Colors may also be used. Make the tasks more complex by causing the child to select from highly related or similar objects, e.g., cars of various colors, sizes, etc. In general, children may respond in a variety of ways. Picture collecting and picture dictionaries aid in concept building and help the child develop auditory-visual matching skills.

c. When teaching action words or verbs, first teach words that depict what a child can actually do. Then help a child to generalize by showing various persons or animals performing the action: the child digging, a man digging, a machine digging. Stress the relationships between the noun and the verb.

...When providing auditory experience for the child, provide a speech model which he can initiate during his own verbal expression. Speak in a distinct, clear voice and at a relatively low tempo. Use words which are appropriate to the child's developmental status.

...When dealing with Verbal Absurdities, state with simple statements (cats bark); require a true-false answer. Then present absurd phrases or sentences based upon common classroom materials. Have children detect and respond to nonsense (Jack has four legs).

...When dealing with Riddles, teach comprehension skills by having children solve riddles presented orally. Riddles help develop receptive vocabulary, categorization ability, and the ability to describe and relate to function. Ex. I have four legs and a tail. You can ride me. What am I?

...Provide many opportunities for the child to encounter verbally presented similarities (e.g., "In what way are an apple and a plum alike?) and analogies ("Fire is hot; ice is ___?").

OBSERVABLE CHARACTERISTICS

AUDITORY ASSOCIATION

SUGGESTED TEACHING STRATEGIES

...Play "What Does It Mean To You?" - e.g., a million years, freedom, happiness, a dollar, a family. On rainy days ask the children what "wetness" means. Ask if they can touch it, feel it, etc. Could you point to wetness? What are the specific facts about wetness? (combine art, poetry, and science). Help children feel and experience this world and help them translate their feelings and experiences into words. How can we tell someone what a delicious smell is like? Help children link words to meaningful experience: If you touched ice you would feel ____? or If you saw a person smile at you, you would think he was (happy, sad, mad). Stress words expressing feelings or emotions: "Sam lost his dog, how do you think he would feel?" Have children look at pictures of different facial expressions, and describe the feeling expressed.

OBSERVABLE CHARACTERISTICS

___ Has difficulty with certain redundancies from his experience:
sequence of numerals (1, 2, 3, 5, 6, 9)
order of words in sentence (He dog play with)
sequence of common sounds (We goed to the store).

___ Has great difficulty with sound blending: "Po-ta'-to: what is that word?

___ Does not do well with phonics approach to reading.

___ Has difficulty with rhyming words and missing words in a sentence.

___ Does not know or cannot supply plural forms of words automatically.

___ Greatest difficulty in supplying or synthesizing words or parts of words automatically.

___ Has difficulty remembering phone numbers, nursery rhymes, names of persons, etc.

___ May be able to sound out phonemic units of words successfully and yet be unable to fuse the sounds together.

___ Has great difficulty integrating isolated sounds into whole words.

___ May exhibit adequate ability on gross comprehension but will usually have difficulty utilizing context clues and difficulty recalling information or details.

AUDITORY AND GRAMMATIC CLOSURE

SUGGESTED TEACHING STRATEGIES

...For extreme difficulties in auditory closure, visual clues are imperative along with a dimension of verbal instructions.

...A fairly simple activity for practice in auditory closure while providing visual clues is to show the child a picture of an object and provide only part of the label for the object, having the child fill in the name, e.g., with a picture of a map, say "ma_" and have the child say the entire word.

...Sound blending games and activities can be useful and easily developed for example, have the child indicate the word after you say its constituent sounds, e.g., "ch-i-n(chin), h-a-t (hat), etc. A simpler version using pictures as the sound elements are spoken, may be necessary for some children.

...Make up sentences for the child to complete, beginning with very simple sentences, e.g., "The lady who teaches us is called a..." (teacher) "After you turn the lights on you can flip the switch to turn the lights..." (off). and gradually progressing to more difficult and complex sentences, e.g., "This is a bar of soap, if I had one more I would have two....." (bars of soap).

...An activity like that described above, but using pictures to provide a visual clue can make the auditory closure practice easier for the child experiencing extreme difficulty. For example, prepare a series of paired pictures of objects: one cat, and more than one; one house, and more than one; etc. While pointing to the appropriate picture say, "Here is a cat, house, etc. Here are two (three, many, lotsof)_____". Have the child fill in the missing word.

OBSERVABLE CHARACTERISTICS

AUDITORY AND GRAMMATIC CLOSURE

SUGGESTED TEACHING STRATEGIES

...Orally presented lists of objects associated with each other can provide relatively easy practice in auditory closure, especially if over-learned material is used, e.g., boys and (girls); potatoes and (gravy); cream and (sugar), etc. A more difficult variation is to have the child "fill in the blanks" by saying the word that is opposite a word the teacher presented, e.g., big and (little); high and (low); first and (last).

...Make a list of partially complete words or words with sounds missing and have the child indicate the expected words. Present words with sounds taken from the end (e.g. baseba(ll), hot do(g), toothbr(ush); the middle (e.g. pea(n)ut, gla(ss)es, Prin(c)ipal); and the beginning (e.g. (p)aperclip, (d)og catcher, (p)uzzle).

...In sound blending, present sounds as close as possible to one another. Work toward a two-second interval.

OBSERVABLE CHARACTERISTICS

__ Cannot hear differences in spoken sounds, e.g., "does it begin with b or d?"; "is it pin or pen?"

__ May not be able to tell differences between sounds (telephone or doorbell) or intensity (loud, soft), if problem is severe.

__ Cannot identify sound effects accurately.

__ Cannot seem to identify sounds correctly.

__ Cannot distinguish speech sounds in words.

__ Cannot learn the sounds of letters.

__ Cannot seem to recognize differences in similar phonic sounds.

__ Cannot consistently differentiate between words sounding similar, such as map, nap. (A child might be told to take a map out of his desk and he perceives that he was told to take a nap on his desk).

__ May have an articulation problem or may misuse "small words".

__ Cannot identify and supply words that rhyme with other words.

__ Seems to have special difficulty with sounds of f, v, s, z, sh, zh, th, t, d, p, g, k, and b.

AUDITORY DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

...Select a sound the youngster is having trouble discriminating, and slowly read a passage or list of sounds with that sound repeated several times, having the child raise his hand each time he hears the sound.

...For specific sounds (e.g., "st" and "sk") play a fill in the blanks game orally, with sentences such as:

A thin person is ___(e.g. skinny)
When we are outside we look up and see the ___ (sky)
The man was mad because his car would not ___ (start)

...Have the child think of all the words he can that rhyme with another word, e.g., "book", "ball", "hill", etc.

...Have the child name all the things he can think of that start with <u>different</u> sounds but that end in the same sound as a base sound you provide, e.g., the teacher says "at", the child says "bat", "cat", "fat", etc.

...The teacher says a word and the child must 1) say a word that rhymes with it, 2) say a word that begins with the same phoneme, or 3) say a word that ends with the same phoneme or (most difficult), 4) say a word that does not rhyme but has the same phoneme in the middle, e.g., "hat" - "man".

...Make a basket or container with cards each with a consonant (or for youngsters at an earlier level, pictures of objects whose words begin with different consonants). The child picking the card says a word that starts with the selected sound (if using pictures only, the word must be different from the object, but must begin with the same sound) to get a point. A second

OBSERVABLE CHARACTERISTICS

AUDITORY DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

child tells a rhyming word to get a point. A third child tells the beginning sound of the rhyming word to get a point (e.g., Card - "c"; 1st child - "cat"; 2nd child - "bat"; 3rd child - "b").

...To teach listening for and recognizing the sounds of phonetic elements: prepare numerous groups of pictures whose words rhyme, e.g., rake, cake, snake. Many games and activities can be derived, e.g., shuffle the cards together and have the child place them in rhyming piles, or have several sets of two or three cards which rhyme together with one that doesn't rhyme and have the child pick out the one that doesn't rhyme.

...Present two sounds at the same time and have the child tell you what they are, e.g., a bell and a drum; rattling keys and tearing paper, tapping a pencil and whistling, etc.

...An interesting way to combine auditory discrimination with sound-symbol association practice is the following activity: the teacher draws a picture on the board or displays a large picture and has the children look at each object in the picture, say its name silently, think about the first sound in the word, decide what letters make that sound. The teacher puts an appropriate letter on the object.

...Practice in auditory discrimination skills combined with auditory-visual match, e.g., "Listen for ape...ope, ip, ape" (child circles or otherwise marks the correct answer on the answer sheet prepared by the teacher).

Have the child make a packet of letters of the alphabet. Working with first a few letters and gradually increasing, have the child hold up the letter which makes the first sound (or, for variation, last sound) in the words you

OBSERVABLE CHARACTERISTICS

AUDITORY DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

pronounce. The whole class can be worked with at once in this game which not only provides auditory discrimination practice but sound-symbol match also. A later variation could have the children print the appropriate letter on small boards or magic slates and hold them up for the teacher to see.

...As with work on articulation and verbal expression, a mirror can be helpful.

...To develop the ability to discriminate auditory stimuli according to category, make a tape of sounds, e.g., on the farm or animals, in home, in school, etc., with accompanying pictures and a separate area or container for each category. When the sounds are presented, the child must recognize the sound and place the picture for that sound in the appropriate category.

...For medial position discrimination difficulties, provide multiple-choice questions that will help the child focus attention on the medial sound, e.g., "we play baseball with a ____ 1) bet, 2) bat, 3) bit.

...For beginning, ending or medial sounds, an activity like the following could be helpful. Write lists of words in groups of two or more, e.g.

sat	sun	sand	(beginning sound)
car	her	stare	(ending sound)
her	burn	dirt	(medial sound)

Tell the child, "Listen to these words and tell me if you hear anything that sounds the same." (pronounce the words slowly. If the child has trouble distinguishing similarities, stress the target sound). "Now, say each word and stress or emphasize the parts that are the same."

...Have the child identify the difference between long and short vowels by stretching upward for long vowels and squatting down for short vowels as you pronounce a list of words.

OBSERVABLE CHARACTERISTICS

___ Cannot identify the intended auditory stimulus when more than one sound is heard at a time.

___ Often cannot "hear" teacher if class is busy and noise level is appreciable.

___ Cannot discriminate between sounds - all sounds like a jumble.

___ Has difficulty with phonics - cannot identify sounds in syllables, vowel sounds, etc.

___ Limited ability to organize the auditory environment so that part-whole relationships are perceived. Confuses figure (that part of the auditory environment that should be most clearly perceived) and ground (the surrounding or ambient auditory context or background).

___ Cannot differentiate between relevant and irrelevant auditory stimuli.

___ May tend to react to the first recognizable element in his auditory environment or to every recognizable element, thus fails to perceive whole.

___ Usually appears inattentive and distractible and, perhaps, disorganized.

___ Has difficulty with auditory discrimination.

AUDITORY FIGURE-GROUND PERCEPTION

SUGGESTED TEACHING STRATEGIES

...The use of tapes and listening centers is very important to the amelioration of auditory figure-ground problems. Practice in having the child attend to and comprehend a target auditory stimulus (e.g., a voice) while competing noises are present comprises a major avenue of amelioration of auditory figure-ground difficulties.

...Develop a tape including continuous background noise with intermittent vocalization. Have the child indicate (e.g., by keeping his hand in the air) whenever the voice is heard. The task can be made increasingly difficult by varying the noise-signal ratio, i.e., making the voice softer or the noise louder.

...The task requiring the child to localize and discriminate between two sounds and follow one of them can be a good auditory figure-ground exercise. Elaboration of the exercise might include having the child follow one sound while introducing several extraneous noises into the child's auditory environment.

...The use of earphones will alleviate much of the background distortion. They help the child to focus or "tune out" irrelevant noise.

...Have the child vocalize a sound, e.g., "mmmmm". Have him continue producing the sound, while you vocalize other sounds, such as, "ssss". The complexity of this activity can be increased by working mainly with sounds the child has trouble with.

...For efficient learning the child must be able to hear both the whole and the parts.

...If possible, use tapes or records to present auditory material. They usually provide more motivation to listen.

OBSERVABLE CHARACTERISTICS

AUDITORY FIGURE-GROUND PERCEPTION

SUGGESTED TEACHING STRATEGIES

...To begin training it is helpful for the teacher to FOCUS for the child, and then allow him to discriminate between two things only. Later increase the number of things.

OBSERVABLE CHARACTERISTICS

___ Seems to be unable to store and/or retrieve information, e.g.,
Q. "The boy's shirt is blue. What color is the boy's shirt?"
A. "I don't know..."

___ On diagnostic tests relating to digit span (ITPA subtest, WISC subtest) will probably score low and be unable to retrieve more than 3-4 numbers correctly.

___ Has difficulty sounding out words; cannot seem to blend sounds or remember sequence of sounds in a word.

___ Cannot seem to carry out oral directions. Doesn't seem to listen to daily classroom instructions or directions (often asking for directions to be repeated as rest of class goes ahead).

___ Seems unable to maintain interest or attention during orally presented lessons.

___ Cannot remember songs, or poems, or simple nursery rhymes or jingles which other children know by heart.

___ May not know address or phone number.

___ Mispronounces words (animal, enemy), compound words or phrases (What there are?, sitter-baby, belldoor, etc.), transposes sounds in words, sentences and phrases.

___ Cannot repeat a sequence of orally presented numbers.

___ Has difficulty in analysis and synthesis of words. Cannot break words into syllables or into individual sounds. Cannot blend sounds adequately.

AUDITORY MEMORY

SUGGESTED TEACHING STRATEGIES

...Provide practice in auditory memory games such as having the child repeat digits, names of letters, words, sounds of letters or even combinations, (e.g., "Say 4-7-3" etc. or "Say 1-N-house").

...If the task is one of remembering and repeating digits, permitting the child to use a telephone to dial the digits can provide interest and motivation.

...A simple recall auditory task is to have the child close his eyes, listen to a sound the teacher makes and to reproduce the sound, e.g., clap hands a certain number of times, stamp foot, hum a brief tune or a few notes, etc.

...Exercise sheets with pictures of familiar objects, used with taped or teacher-read instructions can be used frequently for amelioration of auditory memory and sequencing difficulties, e.g., "Mark the house, the barn, and the chair" (with numerous pictures of common objects) or, "number one, draw a circle around the horse and a box underneath the cat." "Number two, put a letter 'z' beside the apple and write '7-1-4' below the car, etc." A built in delay helps develop memory skills, e.g., do not allow a child to respond until a specified temporal delay "when I say go, place an 'x' on the dog.... (pause gradually increasing).....go."

...The game of Restaurant provides practice in auditory memory. Cut out pictures of food which are given to the "cook" or the "chef". A group of children constitute the "customers". A "waiter" or "waitress" listens to the orders of the customers and repeats them to the cook who must wait until each customer's order is complete and then place the proper food on the tray to be served. Variations include using pictures of other merchandise such as clothing, toys, grocery items, etc.

OBSERVABLE CHARACTERISTICS

___ Blocks during verbal expression. May be unable to recall words needed for clear expression of ideas and may, thus, use inappropriate words.

AUDITORY MEMORY

SUGGESTED TEACHING STRATEGIES

...A task combining auditory memory with auditory discrimination is to have a series of objects which make familiar sounds which the child is able to discriminate between, e.g., bell, drum, door slamming, paper tearing, etc. Present the sounds in pairs and have the child indicate whether the sounds were alike or different. The task can be varied in difficulty and emphasize given to auditory memory by judicious selection of the sounds used and by varying the time between presentation of the sounds. A similar activity, but stressing memory of fine auditory sounds would use phonemes, or words, rather than gross sounds.

...Combining auditory memory with auditory discrimination and comprehension or thinking skills into one game or activity can be useful, e.g., the teacher says a word (e.g. "hat"), the next child must repeat the word and add a rhyming word ("hat" "sat"), etc. with each child repeating the previous words and adding a rhyming word of his own. When the list is too long to remember, or no more rhyming words can be thought of, the child who said the last line can get to start the next game.

...Motoric reaction to auditory direction can help develop the functioning of two neural systems. One system involves understanding and retaining instructions; the other involves translating this understanding into a specified form of motor reaction. Therefore, frequent practice in following in sequence of verbal directions of gradually increasing difficulty can be useful, not only for auditory memory but for learning involving motor skills also. This type of activity can be easily introduced into daily classroom routine, and can be done several times a day. Increased interest can result in having the children playing in small groups with the children given the task of being the teacher on a rotating basis.

OBSERVABLE CHARACTERISTICS

___ May not be able to move to the right or left upon command.

___ May not be able to find the "top, right hand side of the paper".

___ May not be able to read or write from left to right.

___ When at the chalkboard, may start out with chalk in left hand and transfer it to the right hand at the mid-point.

___ May be unable to interpret directions involving "in front of", "on the other side of", "over", etc., with any degree of consistency.

___ May kick a ball with either foot - and may not be able to plan ahead which one to use.

___ Frequently reverses letters, words or numbers when reading, writing or solving computational math problems (confuses b and d).

___ Writing integration tends to be poor and inadequate visual motor integration ability is usually reflected in the child's poorly organized and distorted reproductions of geometric forms.

___ Both gross and fine muscle coordination may be adversely affected, especially skills requiring balance.

___ Tends to have difficulty with sequential memory, spelling, map sense and values in math.

DIRECTIONALITY/
LATERALITY

SUGGESTED TEACHING STRATEGIES

...Carefully observe the youngster's eyes while he is reading to determine eye movement, e.g., frequent "regressive" eye movement, vertical "shifts" etc., which may be an essential part of the youngster's directionality and laterality perception difficulty.

...An early activity for difficulty in directionality perception is to lay out a series of objects, all but one of which are facing the same direction. Have the child select the reversed object or all the objects that are pointing in one direction. After using concrete objects progress to or simple objects, more complex pictures, shapes and letters.

...Using a city map of a large city, play a "Directions Game". Have the child start at a specified point and direct him to another part of town, e.g., "With your finger go three blocks north, (pause), turn left, go one block and turn north, etc.

...Present a series of increasingly difficult pictures of letters, words, objects, shapes, etc. in pairs, some of whose members are exactly alike and others of which are mirror images. Have the child identify which pairs are identical or which pairs are mirror images (reversals).

...A child with the "b" "d" reversal difficulty, should practice making "b's" and "d's" on cued worksheets. Have a worksheet with the stick of the "b" already drawn in at the extreme left of the paper, so there is no possibility of a backward "b". Likewise place the vertical stroke for the "d" at the extreme right hand side of the paper. Gradually diminish the visual cue available by having the vertical stroke progress to a broken line, than a dotted line, two vertically placed dots. then, perhaps to just one dot as an "anchor" to no visual cue at all.

OBSERVABLE CHARACTERISTICS

DIRECTIONALITY/
LATERALITY

SUGGESTED TEACHING STRATEGIES

...The "screen technique" is both fascinating and often of great utility with visual-motor integration difficulties as well as the directionality and laterality components. Place a piece of paper over a small piece of window screen. With a crayon draw the letter (or numeral, shape, etc.) you wish to teach. A small part of the crayon will be removed creating hundreds of tiny crayon dots on the paper. The dots which formulate the letter, etc., can then be traced repeatedly with the child's finger, each time providing tactile as well as proprioceptive reinforcement. It also helps to have the child say the name or sound of the letter as he traces.

...An ingenious and constantly available cue for "b" and "d" reversals is to have the child make a fist with each hand with the thumbs pointing up and perpendicular to the four fingers. In this position the outline of the left hand is roughly the shape of a "b" and the right hand is roughly the shape of a "d". If the child can memorize something like "a b c d" while placing his hands in position at the appropriate time, he will always have available an answer to his "b-d" dilemma. The same idea will work with thumbs pointing down for "p" and "q".

..Use color coding according to position in a word, e.g., the first letter or group of early letters is always green (for "go"), the second letter or middle group of letters is yellow, and the final letter or group of letters is red (stop). A frequently used variation is to color code only the first letter green ("go" or "begin here").

OBSERVABLE CHARACTERISTICS

Time

__ Does not understand "soon" or "in a little while", or other "vague" terms.

__ Calendar months and days are not understood at all, e.g., may know date and month of birthday, but not when it will occur or did occur.

__ Difficulty in telling time by the clock. Even with much work, continues to say: "the big hand is on the ...

__ May know by rote that 4 follows 3 (1, 2, 3, 4), but can't perceive that 4 o'clock follows 3 o'clock.

ORIENTATION

Space

__ Transfers to new spatial relationships are very difficult, e.g., if the room is rearranged while the child is gone from the room, he becomes disoriented and confused.

__ Far space relationships are more confusing than near space. "The other side of the room" has no meaning for the child - neither has "halfway home."

__ Much difficulty in copying figures, symbols, or words, either in the expected order or position, (e.g., papers often look like a disordered hen house).

__ Cannot ascertain relationships of two or more objects to each other.

SUGGESTED TEACHING STRATEGIES

Time

...A digital clock with concrete time given may help the child to relate time concepts. With the numbers (referring to seconds and minutes) actually "turning" such a child can actually "see" time changing.

...Give the child a concrete referent. Instead of saying "recess in a little while", draw a picture of a clock with the hands at 10:15 and say: "when the clock looks like this, it will be 10:15 and then we'll go for recess."

...Be prepared to go over time concepts over and over, until the child is really sure and EVERY DAY can demonstrate his internalization of that concept.

Space

...New relationships of objects (moving furniture, changing bulletin boards, etc.) should be planned and carried out with the child aware of the proposed change.

...Work on near space relationships before far space - e.g., work with the child on understanding relationships that have a more personal relationship to him, such as "on your desk," "under your seat"; then such things as "down the hall," "by the swings," "a before c," can be approached.

...Will need many, many concrete examples of spatial relationships, especially things like over, under, behind, before, across, etc.

OBSERVABLE CHARACTERISTICS

___ May exhibit distorted body image and this distortion will tend to reflect itself in the child's drawings of human figures.

___ Directionality/laterality problems evident; child confuses left-right and other directional concepts. May experience difficulty when attempting to carry out instructions involving directions (i.e. "Raise your left arm").

___ May have difficulty understanding words designating spatial location (in-out, up-down, front-back, etc.).

___ Impaired size discrimination and impaired judgment of distance may be characteristic.

___ Writing ability may be impaired. Written work is usually messy, printed or written words are poorly spaced and may run together and written work may run off the page.

___ Tends to reverse certain letters, words and/or numbers (b for d, p for q, on for no, saw for was, 24 for 42, 6 for 9, etc.).

___ Spelling impaired by inability to maintain spatial sequence which disrupts spatial and temporal organization and produces reversals and rotations.

___ Arithmetic is usually impaired - especially abstract number concepts. Child frequently needs concrete objects in order to orient himself spatially and in order to adequately relate the parts into a total visual-spatial pattern.

SPATIAL AWARENESS

SUGGESTED TEACHING STRATEGIES

...Create simple or stick drawings of objects showing clear visual relationships to each other, e.g., a picture of a chair and a cat. Ask the child questions about the objects' physical relationship. "What is the relationship between the cat and the chair?" If the child provides an inadequate answer or is unable to answer ask, "Is the cat <u>on</u> the chair?", etc.

...At the blackboard, have the child draw lines "up", "down", "away from your body", etc. A variation which also involves directionality and laterality is to have a piece of chalk in both hands and give directions, e.g., "with your left hand draw a line traveling to the right.", etc.

...Have the child indicate his relative distance from objects in the room, e.g., "Are you nearer the front or the back of the room?" "Is the big chair closer to you than the green book?" "Can you touch the window from there?", etc.

...Having the child perform body and body part movement in front of the mirror so he can receive visual as well as kinesthetic and proprioceptive feedback should help improve spatial awareness. An intriguing variation is to have the children play the mirror game in pairs. Two children face each other and take turns making body movements while the other child tries to mirror the movements of the first child, as simultaneously as possible.

OBSERVABLE CHARACTERISTICS

____ Letters within words are frequently scrambled, reversed, or rotated.

____ Has difficulty with orientation when attempting to interpret maps, diagrams, graphs - and, perhaps, even the face of a clock. Time orientation may be deficient.

SPATIAL AWARENESS

SUGGESTED TEACHING STRATEGIES

...The game of "Freeze" or "Statue" should be of utility. Have the children dance, skip, or whirl around until some prearranged signal to stop. The leader selects one of the students in an unusual or interesting position and has the other children imitate. The one whom the leader selects as having done the best imitation gets to be leader for the next round.

OBSERVABLE CHARACTERISTICS

___ May score low on the WISC or Binet vocabulary subtest, or the Binet verbal response to pictures.

___ Severe articulation disorders and/or other speech problems may be present.

___ May answer specific questions, but be unable to answer more open-ended types of questions (such as "tell me what you know about....").

___ May rely heavily on gesture or non-verbal responses (nodding or shaking head).

___ May raise his hand indicating he knows the answer to the question, but be unable to express himself adequately.

___ May talk a lot; on closer analysis it is seen to be irrelevant chatter, with few relevant concepts expressed.

___ When telling about something with which he is VERY familiar (home, brothers and sisters, etc.) may still be unable to use more than 5 or 6 words in a sentence.

___ Cannot verbalize any definition, although he may be able to respond to a word by pointing to the object or to a picture of the object.

___ Unable to repeat the name of an object or use the name of the object in a sentence.

___ Unable to define a word by stating its use. Vocabulary is limited. Few descriptive words are utilized.

VERBAL EXPRESSION

SUGGESTED TEACHING STRATEGIES

...If a child's word description behavior is deficient in terms of any given view point, give that area special emphasis. Utilize illustration and demonstration and ask loaded questions that make view points explicit, e.g., "What do we do with it? What does it feel like?", etc. Provide the answers to these questions if the child cannot do so. Depending upon the child's ability, request that a certain number of viewpoints be treated in the child's description, regardless of whether the child's number of descriptive features is two or ten. The goal is to provide structure and illustration to emphasize the view point and allow the child to gradually increase his ability to reap increasing meaning from objects. As the child develops, he can be encouraged to tell "all he can" about objects.

...Label three shoe boxes "Taste", "Smell", and "Feel". In the "Taste" box place small items such as small pieces of candy, grapes, nuts, gum chicklets, etc.; flowers, perfume, fruit, coffee, leather, and other items are placed in the "Smell" box. In the "Feel" box, place such items as a piece of fur, glass, silk, metal, feathers, blocks, marbles, balls, etc. Have the child taste, smell, feel and then describe the objects. The child (eyes open or closed) must observe and verbally relate the features of the object relative to, for example roughness, sharpness, shape, edges, and parts so that his descriptions become an elaborating set of "eyes" for the child.

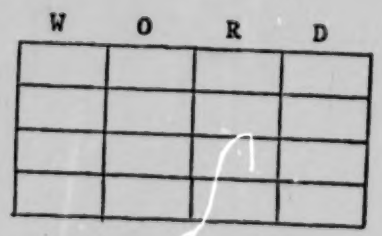
...Combine actions or body posture for more effective learning of adverbs and adjectives, e.g., have the child walk "slowly", "quickly", "shyly", "enthusiastically", etc. Have the child demonstrate by body posture, facial expression, "bubbly", "delighted", "surprised", etc.

OBSERVABLE CHARACTERISTICS

VERBAL EXPRESSION

SUGGESTED TEACHING STRATEGIES

...The game of "WORD" or "WORDS" (consisting of a modification of Bingo, but using pictures or words) can be used repeatedly with continued interest for vocabulary expansion and reinforcement. Create "WORD" cards with a picture in each of sixteen spaces, arranged like a mini-bingo card:



From a container, randomly pick words naming or associated with the prepared pictures, announcing them in a similar format as "Bingo", e.g., under the "W" a picture that shows "delight" (a dog, a calendar, surprise, transportation, etc.). Be sure the "WORD" cards are different; have about eight or ten associated pictures and numerous duplicates to be scattered throughout the several cards for each of the four slots in each of the columns.

...Encourage the child's exploration of shades of meaning, connotations, or nuances of words. Some children have to be directly taught that the same word can have a multiplicity of meanings and/or that different words can have the same or similar meanings. One technique to promote the concept that different words have similar meanings is to frequently, in explaining material or accepting a student's response, directly provide synonyms or words expressing related or appropriate concepts, e.g. "Yes, that problem is hard or confusing, it's complex." Be careful, however, not to provide too many or too sophisticated words, thereby adding to the child's difficulty.

OBSERVABLE CHARACTERISTICS

VERBAL EXPRESSION

SUGGESTED TEACHING STRATEGIES

...Play the word game "How Many Ways?" Encourage the child to use descriptive words, by asking, for example, "How many ways can we say 'good'?" (wonderful, great, OK, super, favorable, etc.). Work also with categories, e.g., "How many ways can we say workers?" (postman, storekeeper, secretary, etc.).

...Daily present (or have the children provide, with the teacher's help if necessary) a "Word for the Day." The teacher or child presents the word and gives its definition. The children are encouraged to use the word and are reinforced in some manner for each appropriate use of the word that day, or perhaps, even that week.

...Cut up old dictionaries, separating words from their definitions. Have the child correctly match the definitions and words.

OBSERVABLE CHARACTERISTICS

___ Tends to interpret what he sees in a highly literal fashion and may have extreme difficulty with abstractions. May frequently misinterpret what he sees.

___ May have difficulty perceiving and/or recalling details, specific items, fundamental concepts or main ideas in visually presented materials.

___ Behavior reflects limited ability to manipulate information gained through the visual channel and limited ability to organize visual percepts and concepts.

___ May have difficulty recognizing (and recalling) relationships - including likenesses and differences in characters, times and places, and cause and effect relationships. Child may seem unconcerned with relationships or may see visually presented objects and events as separate items.

___ Cannot seem to form sensory impates of a visual nature; may not be able to recognize simple emotional reactions or motives on the basis of visual cues (facial expressions or other body language).

___ Cannot arrange or recall a sequence of meaningful pictures; that is, may have difficulty arranging a series of pictures depicting actions, facts, incidents or ideas into proper sequence so that they portray a meaningful story.

___ May be unable to compare and contrast, make judgments about, classify or categorize visually presented materials.

___ May have difficulty inferring supportive details or main ideas of visually presented materials. May be unable to infer relationships or to predict outcomes (hypothesize

VISUAL ASSOCIATION

SUGGESTED TEACHING STRATEGIES

...Show, using increasingly difficult levels of abstractions, pictures of associated objects. Ask the child, "How is this (pointing to object) the same as (or different from) this?"

...Comic strips constitute a convenient source of materials emphasizing visual comprehension. Prior to the development of reading skills, have the child try to guess the story with only a minimum of clues from you. Or, even after reading skills are developed, cut apart the comic strip and have the child place the parts in their proper sequence, which will assist in developing visual sequencing skills.

...Develop vocabulary by having children group pictures (then words) into various classifications or categories (animals, community helpers, toys, clothes), develop ability to see relationships by requiring children to match community helper with his uniform, equipment used, function, etc.

...Cut out pictures of objects from several general categories. Initially you may have to tell the child the category or categories. A variation is to cut out or devise pictures of scenes which can be divided into categories, pictures of expressions (happy, sad, frightened, etc.) seasons of the year, ages of people, etc.

...One method of helping the child to understand what he sees is to provide structured practice in observation. Prepare a list of a few brief questions about certain places, e.g., the playground, the gym, the nurse's office, etc. Have the child go to the area, and through observation, answer the questions.

...Present a series of strips of paper with sentences randomized from a paragraph, telling a story, giving a description, etc. Have the child put the sentences in their proper order. Obviously, this activity also involves visual sequencing.

OBSERVABLE CHARACTERISTICS

what would happen next).

___ May be unable to appreciate humor depicted visually.

___ Verbal and/or motoric responses to visual stimuli may be frequently out of context, confused, inappropriate or incomplete.

VISUAL ASSOCIATION

SUGGESTED TEACHING STRATEGIES

...Create examples of the activity which utilizes a chart in which the child, by changing one letter at a time, changes one word to another entirely different, e.g.,

b	(b)	(b)	h	c	(c)	(b)	(b)	b
i	(a)	(a)	a	a	(a)	(a)	(a)	o
g	(g)	(t)	t	g	(r)	(r)	(r)	r
				e	(e)	(e)	(n)	n

...Formulate lists of words and questions centering around categories, such as animals (or specific categories of animals, such as domesticated, four-legged mammals, etc.), fruits, etc., e.g. "A lemon is a fruit. Pick out three other fruits." (Increase difficulty by having the child select only citrus fruits, or fruits smaller than an orange, or fruits which grow mainly in the South, etc.).

OBSERVABLE CHARACTERISTICS

___ May be unable to fill in missing parts automatically (cannot see that the nose is missing from the face).

___ Cannot extract necessary parts from distracting background (i.e. the name of the book on the cover).

___ If worksheet is messy, child cannot reject that and concentrate on his work.

___ May be unable to reorientate pieces and put them together to form whole (does not turn puzzle pieces over or upside down to fit it).

___ In reading, fixations per line stays at a very high level (8-12), and hence reading speed does not increase.

___ Greatest difficulty in seeing the completed form automatically.

___ Cannot adequately anticipate or supply missing visual elements when presented with an incomplete visual stimulus.

___ Tends to be disorganized and tends to be a weak automatizer.

___ Word analysis skills and work synthesis skills are very poor. Child cannot adequately utilize structural analysis skills or context clues.

VISUAL CLOSURE

SUGGESTED TEACHING STRATEGIES

...Let the child put together form boards and jigsaw puzzles of increasing difficulty, with and without seeing the completed model. Use simple figures differentiated from the background at first. Make the total picture more interesting than the pieces.

...Trace around actual objects, e.g., sissors, pencil, eraser, and have the youngster identify the object traced. A variation is to draw the expected outline of various objects or categories of objects, e.g., fruits and vegetables, vehicles of transportation, animals, etc.

...Make a series of incomplete drawings of common geometrical shapes, e.g., squares, circles, hexagons, etc., of increasing complexity. Have the child indicate the missing part. To make the task easier for children needing it, present a drawing of the complete object or design along with the drawing of the incomplete object. This activity becomes a useful one for visual-motor integration when the child is asked to draw in the missing part and becomes an exercise in visual comprehension as the stimulus becomes increasingly complex and novel, such as with symetrical designs.

...Provide visual closure activities without drawing missing part pictures is to cut out objects from magazines and cut off parts of the object: e.g., a leg off a table, a tail from an animal, etc. Have the child indicate what part is missing.

...Create lists of compound words presented in two columns:

watch	pie
mud	pet
in	walk
car	side
side	man

OBSERVABLE CHARACTERISTICS

VISUAL CLOSURE

SUGGESTED TEACHING STRATEGIES

Have the child draw a line from one word to the part that goes with it to form a compound word. A more difficult variation is to present parts of words in two or more columns and have the child draw lines to indicate which parts go together to form a word.

har	v	er
quar	pho	est
tele	t	ne

...Present a child with a paragraph containing words which have been separated according to syllables or divided randomly and have him try to decode the paragraph or the "secret message". Be sure the paragraph is not so hard as to merely be providing additional frustration for the child.

...Develop a series of clear plastic overlays (of increasing complexity) with heavy colored lines which can be placed on top of selected pictures to divide the pictures and block out some of the picture beneath the overlay and have the child try to identify the picture. The difficulty of the task can be manipulated according to the current skills of the child by placing easier overlays (a black line bisecting the picture), or more difficult overlays (an overlay with numerous wavy lines covering much of the picture). Another variation is to place several overlays over a picture and remove the overlays one at a time until the child can recognize the picture, always working toward recognition with fewest possible clues.

OBSERVABLE CHARACTERISTICS

___ Cannot see the difference between letters, numbers, objects, forms.

___ May have difficulty with p, g, d, g.

___ May learn to read a letter or word in a given context. script, or type but fail to recognize this same word or letter when it is presented in a different context, etc. May fail to recognize the same word or letter (already recognized) in the very next sentence.

___ Tends to have great difficulty differentiating betweeen or among objects on the basis of external form, relative size, internal detail, color, texture, and/or number of items or parts.

___ May have difficulty at any point on the discrimination continuum-e.g. matching concrete objects that are grossly different to differentiating highly confusing (very similar) pictures, words, letters, or phrases.

___ Tends to confuse words that look alike. May confuse words with the same or similar beginnings or may confuse similar beginnings and endings of words.

___ Tends to reverse letters and/or words in writing and copying; frequent perceptual reversals in reading and writing letters and numbers.

___ Size discrimination and depth perception are often impaired.

___ Seems unable to maintain interest and attention during visually presented lessons.

___ Sight vocabulary tends to be limited and the child tends to experience difficulty in word analysis skills.

VISUAL DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

...Give each child a piece of paper with a block of color in one corner. The children then search through old magazines and cut out any object which is the same color as their target color.

...Give the child a container with numerous pieces of alphabet dry cereal. Specify a letter/ if the child can locate an example of the letter, he is allowed to eat it after showing it to you.

...Create various gamesboards of a fairly durable material (cardboard, several layers of heavy paper glued together, etc.). Interest and group participation are generated by gamesboards resembling a football field or fields for other sports, a racetrack such as an oval for cards or horses, cities with street blocks, etc. Have the child pick up a word, letter, number, or any other visual material which you wish to teach from a facedown pile. If he reads the word correctly, identifies the form, etc., he gets to move one space. If he misses, he stays or perhaps even retreats one space. Play continues until the goal of the game is reached, e.g. touchdown, reaching home, etc. By changing the visual material (words etc.) used in the game, the same gameboard can be used by children at greatly different levels.

...A modification of "Musical Chairs" can be entertaining and useful for color, shape, size, number, texture, etc. discrimination. One child sits in the middle of a circle of children seated on chairs. Each child on a chair also has one or more cards each with a different color (or shape, etc.). When the teacher holds up a card, children with a card having the same aspect are to change seats while the child in the middle tries to get a chair. The child left without a chair or a child who fails to move as indicated goes to the middle.

OBSERVABLE CHARACTERISTICS

_ Is a word-by-word reader, and reading performance is characterized by many substitutions, mispronunciations, insertions, and omissions.

VISUAL DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

...Draw numbers, letters, words, or other visual material on individual cards. Place the cards randomly on the floor. The child steps on the cards as the teacher names them. The movement and interest facilitates learning and may be especially useful for some children or during periods of the day when movement is desirable. This activity also is an excellent one for role reversal, with the teacher stepping on the cards upon the student's command, "accidently" making some mistakes for feedback. The activity also can be useful for sequence before the child is permitted to step on any cards. Mathematics and number concepts can be enhanced also, e.g. "Step on the one that stands for three plus two". "Step on all numerals that are smaller than four".

...A very common visual difficulty is the failure to attend to (or respond appropriately to) the interior detail of words. Considerable work with interior detail will be necessary for youngsters with severe difficulties in this area. For example, give the child individual cards with vowels and vowel blends (e.g. "ea", "ee", "oi", etc.) and a worksheet of beginning and endings of words for him to fill in or otherwise indicate an appropriate work interior, e.g. gr_t, s_l, b_t, etc. Obviously this activity also involves visual comprehension, visual memory, left-to-right orientation, and visual-motor integration.

OBSERVABLE CHARACTERISTICS

VISUAL DISCRIMINATION

SUGGESTED TEACHING STRATEGIES

...The game "Switch" helps develop word analysis skills. Prepare a deck of words into four or more different rhyming endings and one or more "Switch" cards. Each player gets five cards; the remainder are placed facedown in a pile. The first player lays down a card. The next player must play a card which has the same initial letter or the same ending letters (rhymes). If he cannot he must draw a card from the pile until he can play or has drawn three times. Play a "Switch" card allows the youngster to name a new word of his choosing. The first player to get rid of his cards wins.

...As the children gain facility in letter recognition or reading, don't overlook the potential use of newspapers. For example, have the child identify (cross out, circle, etc.) every example of a selected letter or letters; or every capital letter or punctuation mark, or have the child bring examples of typographical errors that they have found.

...Children's natural interest in typewriters can be channeled toward visual discrimination practice. Show the child a letter of the alphabet or typewriter symbol and have him find and type it. Visual sequential memory, figure-ground discrimination and visual-motor integration skills can also be enhanced by this and modified activities with the typewriter.

OBSERVABLE CHARACTERISTICS

___ Cannot seem to pick out an object when competing objects are in the picture.

___ May color the entire picture one color, because of inability to focus on the component parts.

___ May be unable to pick out a specific letter from a group of letters (word), or a specific word when faced with a number of words (paragraphs).

___ Has great difficulty discriminating parts from the whole or perceiving parts in relation to the whole. May tend not to see wholes - rather, child perceives the whole as a meaningless jumble of details. Words are perceived as a series of unrelated letters.

___ May experience much difficulty when attempting to interpret a picture. In severe cases child may not be able to derive minimal understanding from even a simple picture.

___ Has great difficulty noting details visually, and seemingly cannot compare and contrast various details. Consequently, child has difficulty decoding complex words.

___ Tends to have great difficulty with small or unusual type.

___ Writing form is generally poor and child usually has great difficulty accomplishing cursive writing.

___ Reproductions of geometric forms are usually distorted and fragmented.

___ During oral reading, child may confuse word order and tends to make many omissions and substitutions.

VISUAL FIGURE-GROUND PERCEPTION

SUGGESTED TEACHING STRATEGIES

...Provide a simple backdrop or background scene and place three-dimensional then two-dimensional objects in front for observation and discussion. Help the child select the important features of the pictures or the scenes. Gradually increase the complexity of the background and make the figures less obvious.

...Give the child cutouts of familiar basic geometric forms (circle, square, triangle, rectangle). Have him place the cutouts on pictures of familiar objects or scenes wherever the shape of the cutout matches a shape occurring in the pictured object or scene. A variation is to have the youngster place or scotch-tape his cutouts wherever he finds an object in the room that contains one of the shapes. The creative teacher can also draw pictures containing numerous shapes to match the cutouts given to the student. This exercise also involves form constancy and other associated visual functions.

...A simple classroom activity involving visual figure-ground is to move various objects in the room and have the child point to or otherwise locate them. The difficulty of the activity can be varied by varying the visability or "visual access" of the objects.

...The game of "Color Search" can be useful for individuals or groups. The children close their eyes while another child hides a crayon or small colored piece of paper near or on an object containing the same color. As each child finds the crayon or paper he whispers the location to the child who hid it. When all members of the group have found the color, a new group plays the game. This activity is also a visual discrimination activity.

OBSERVABLE CHARACTERISTICS

VISUAL FIGURE-GROUND PERCEPTION

SUGGESTED TEACHING STRATEGIES

...Invite the child to make simple drawings with objects placed on top of, in front of, etc. other objects, e.g., "Draw a house. Put a walk in front going to the street," etc. A variation is to provide the dominant figure, e.g., a tree, and have the youngster draw objects (apples, people, sun, etc.), in various places you specify.

...It is a good idea never to assume that the youngster with significant visual figure-ground difficulties has "seen" the relevant aspect of all visual material you present. Attempt to ascertain if his view and comprehension of the picture or object conforms to what you were presenting, since this child frequently is focusing upon an inappropriate aspect of the visual stimulus. Have him point to the relevant aspect or gain feedback from him in any inconspicuous way, e.g., cautious questioning.

...For a youngster severely impaired in visual figure-ground skills, it may be necessary to outline essential features in pictures, using heavy black lines. A variation is to frame the essential parts of a picture with a cardboard cutout to focus attention on the appropriate portions of the picture.

...A youngster with severe figure-ground difficulties will encounter significant problems in reading pages too crowded with words. Often this youngster's difficulty goes undetected until reading of sentences or paragraphs. Allow the child to use such crutches as markers or sentence length rectangles cut in a piece of paper to screen out confusing background material.

OBSERVABLE CHARACTERISTICS

___ Seems to be unable to remember either what he just saw and/or what he saw awhile ago.

___ When asked to verbalize what he just saw (picture, word, movie, etc.), will stutter and stammer and be unable to provide appropriate answer, even when helped.

___ If something is erased from the chalkboard, will probably not remember what was there.

___ Always "loses" when playing classroom games such as "Memory" or "Concentration".

___ May appear too attentive when involved in visual memory tasks or may be unable to maintain interest and attention during visually presented lesson.

___ Cannot seem to learn the alphabet by heart and may have difficulty learning the sounds of letters.

___ Cannot readily reproduce a sequence of visual configurations or symbols.

___ Form constancy and visual closure may be impaired.

___ Will be deficient in sight word vocabulary and in word attack skills. His reading and/or word recognition will be inconsistent and will be characterized by reversals of letter or word order, perhaps by excessive substitution.

___ Poor visual memory for printed and written words will result in inadequate ability to recall word configuration and/or details, so writing and spelling tend to be impaired.

VISUAL MEMORY

SUGGESTED TEACHING STRATEGIES

...Give the child two or more cards, each with an outline of one common geometrical form. Present two or more design cards in sequence for a specified period of time. Hide the stimulus and have the child repeat the sequence from memory.

...A fun and interesting visual memory activity for two or more youngsters is to give each the same number of pegs and have them, in turn, make a pegboard design, allow the other(s) to see it while he counts to ten, and then hide the design and see who can reproduce it from memory.

...Fold a piece of paper with one or more folds, gradually increasing the number or complexity of the folds or decreasing the amount of viewing time, etc. Have the child reproduce the sequence of folds. This activity also has a strong visual-motor integration component.

...Invite the child to play memory games with himself e.g., trying to memorize license plates while going to and from school, remembering what he had for breakfast, recalling details of a movie he saw, etc.

...The game of "Modify" or "Change" is a useful group activity for visual memory practice. The teacher draws a very simple figure at the blackboard. The students hide their eyes while the teacher or a selected child alters the picture slightly. The child who can correctly tell how the figure was changed gets to make the next alteration, and the game continues. A variation is to occasionally make up no changes to see if the children can readily detect that no change was made.

...An interesting visual memory activity consists of folding a paper lengthwise like a book and putting one word (or letter or number, design, etc.) on the outside "cover". On the inside put a word which is grossly dissimilar, similar, or exactly the same as its counterpart on the cover. The

OBSERVABLE CHARACTERISTICS

SUGGESTED TEACHING STRATEGIES

child must decide if the word on the inside is the same or different from the outside. If the child is permitted to look back and forth at the same word the same material can serve as a discrimination activity for a child with visual discrimination problems.

..."What word is this game?" Present words with scrambled letters and have the child determine what word it is, e.g., rca(car), ehros(horse), pujm(jump), etc.

..."Letter riddles" can be fun and useful activity: "I'm found in bread, but not in red; I'm found in bat, but not in hat. What letter am I?" (b)

VISUAL MEMORY

OBSERVABLE CHARACTERISTICS

____ Inadequate motor control (gross muscle and/or fine muscle coordination) may be symptomatic. If so, child will tend to grip his pencil in an awkward fashion, hand tremors will be evident in his written productions, and all written productions will reflect a basic difficulty in control of size and with integration of lines.

____ May have difficulty utilizing eyes to "steer" direct and monitor hand movements.

____ Has difficulty with proper orientation of words and drawings when writing on page, although board work will tend to be more acceptable in terms of form, continuity and neatness.

____ Writing tends to be crooked, and letters and words may be poorly spaced.

____ May have difficulty staying on ruled lines.

____ Arithmetic tends to be hampered by the child's inability to align both horizontal and vertical series of numbers.

____ May tend to feel or trace in an effort to get kinesthetic-tactile feedback prior to attempting to reproduce a figure or form.

____ May use hands or fingers to keep his place while reading or may use hand to control spacing and alignment on the page.

____ Tends to do poorly on timed tasks.

____ Performs poorly in sports; he may be clumsy, walk and run awkwardly and be unable to perform adequately when skipping or jumping rope.

VISUAL-MOTOR COORDINATION

SUGGESTED TEACHING STRATEGIES

...Design a game board of squares with colors or some other very simple system of differentiating squares. Have the child throw objects (e.g., coins, poker chips, bottle caps, etc.) to specified squares. A point system may improve motivation, especially if a child with visual-motor integration problems "keeps score with himself" for day to day improvement rather than always competing with students with more adequate development.

...Allow the child to perform visual-motor integration tasks with media other than just paper and pencil. Watercolor paints, clay, crayons, sticks shaped like pencils, etc., add interest and renewed motivation to an otherwise routine or boring task.

..."Chase the pig" is a fun activity. One child or the teacher places two dots on the blackboard and a second child draws a line from one dot to the other. A new dot is made and the chase continues.

...A common and fascinating visual-motor integration activity requires two flashlights and a room with diminished lighting. One child or the teacher points a flashlight on a wall, on the ceiling, etc., and a second child tries to follow or "catch" the light with his flashlight.

..."Direction" or design cards for the child to copy or trace, either by laying onion skin paper or a transparency over the card, can be useful especially if minute graded steps of difficulty gently promote skills necessary for printing. Start with very simple designs, e.g., a series of identical, vertical strokes, later proceeding to slanted lines and more complex material, e.g., letters requiring more adequate visual-motor integration skill development.

OBSERVABLE CHARACTERISTICS

- Tends to confuse left-right and other directional concepts. This will impair visual-to-motor match and lower performance in all copying tasks.

VISUAL-MOTOR COORDINATION

SUGGESTED TEACHING STRATEGIES

...A youngster with great difficulty in visual-motor integration development or with very limited experience with a pencil may have to be given time initially to practice such simple activities as scribbling or coloring. Finger paints perform much the same function as scribbling but present a more acceptable activity in terms of the peer group for school aged children. Media that can be highly motivating are sand, water, dirt, etc. For example, have the child swiftly wave a stick in water in a pan, first touching both sides of the pan. Then encourage him to touch only one side with the stick and merely come close to the other side. Then have him attempt to come as close as possible to both sides without touching either.

...Drawing and tracing activities form an important base for improvement of visual-motor integration skills. Begin with simple designs, drawings, etc., gradually adding complexity and increasing your demand for greater accuracy. Provide numerous opportunities (worksheets, etc.) for the child to draw with a pencil, crayon, etc. For example, have the child draw numerous lines from left to right (e.g., dot to dot or from vertical line on the left to a vertical line on the right). Encourage the youngster to draw single continuous circles (counter clockwise). End variations such as changing the size of the circles, varying the speed, drawing circles with both hands (counter clockwise with right hand and clockwise with left). Another variation is to have the youngster draw a series of continuous circles or cursive letters, i's, l's, e's, etc.

...Balance beam activities help enhance coordination of what the eye sees and what the body does. The enterprising teacher does not need an actual balance beam to provide balance beam activities. Merely stick a strip of masking tape in a line along the floor and make the tape your balance

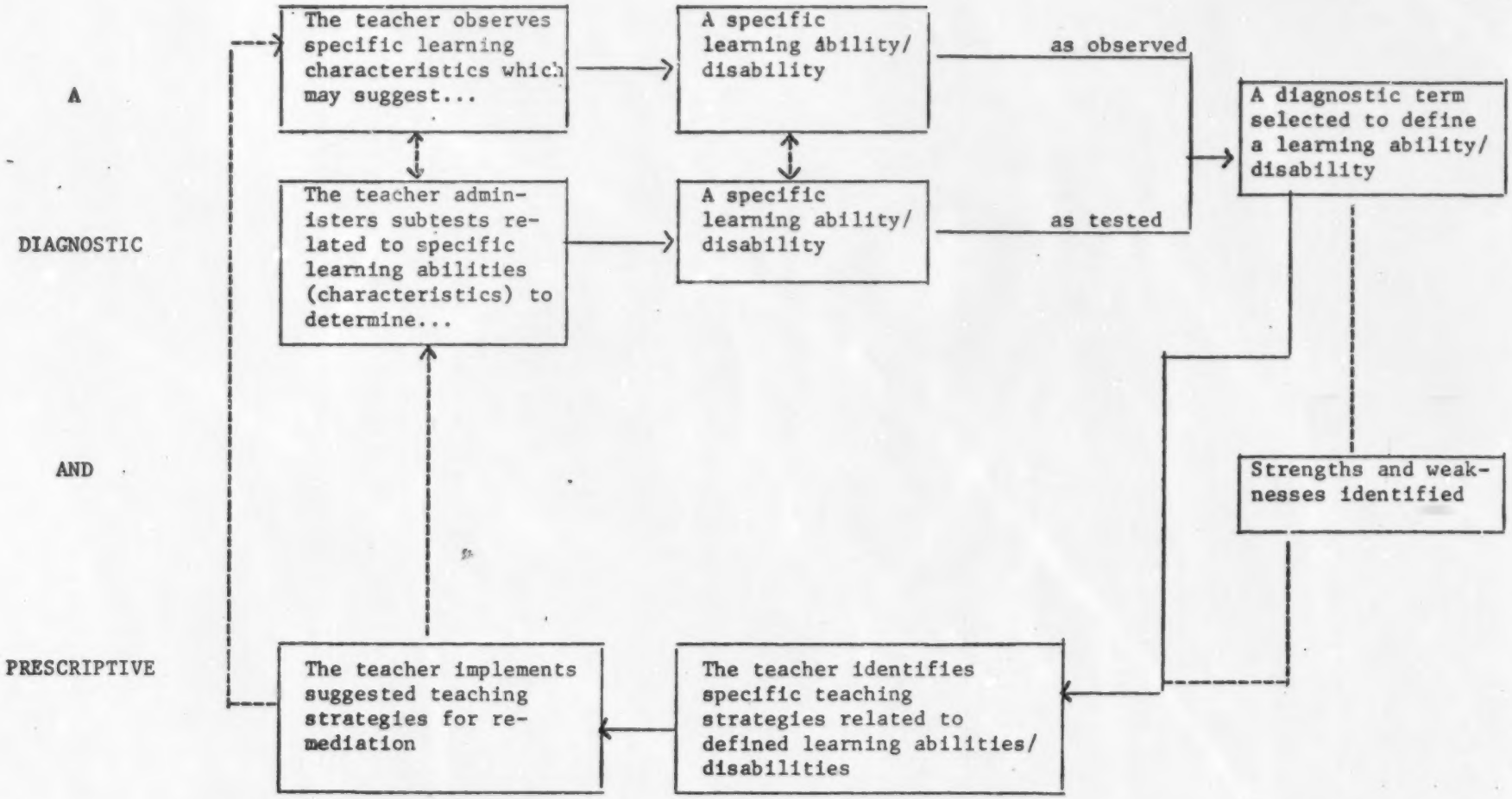
OBSERVABLE CHARACTERISTICS

SUGGESTED TEACHING STRATEGIES

beam, or the edge of a cliff - for the child to walk along without falling off. A variation is to place two parallel strips of tape and have the child attempt to walk through without touching either tape. You can do virtually every type of balance beam activity perhaps without the kinesthetic feedback but with an assured amount of safety.

VISUAL-MOTOR COORDINATION

APPENDIX A


A
DIAGNOSTIC
AND
PRESCRIPTIVE
SCHEMA
The teacher observes specific learning characteristics which may suggest...
A specific learning ability/ disability
as observed
A diagnostic term selected to define a learning ability/ disability
The teacher administers subtests related to specific learning abilities (characteristics) to determine...
A specific learning ability/ disability
as tested
Strengths and weaknesses identified
The teacher implements suggested teaching strategies for remediation
The teacher identifies specific teaching strategies related to defined learning abilities/ disabilities

APPENDIX B

DEFINITIONS

AUDITORY ASSOCIATION: The ability to relate one auditory stimulus meaningfully with another or others.

AUDITORY CLOSURE: The ability to 'hear' the whole sound or word when only a part is present.

AUDITORY DISCRIMINATION: The ability to differentiate similarities and differences among auditory stimuli.

AUDITORY FIGURE-GROUND: The ability to organize the auditory environment so that part-whole relationships are perceived.

AUDITORY MEMORY: The ability to remember on a short-and/or long term basis material that is heard.

CODING PERFORMANCE: The ability to shift attention, direct eye movements, remember for short periods, handle symbols, perceive position in space and spatial relationships, write with facility, and react with speed.

DIRECTIONALITY: The ability to differentiate up from down, in from out, forward from backward, north from south, etc.

EXPRESSIVE LANGUAGE: The ability to communicate thoughts, ideas, and/or feelings to another person through the use of gestures, spoken words, writing, or any combination of media.

FORM CONSTANCY: The ability to recognize standard forms in changing environments.

GRAMMATIC CLOSURE: The ability to make use of the redundancies of oral language in acquiring automatic habits for handling syntax and grammatic inflections.

LATERALITY: The ability to differentiate right from left on oneself, for mirror image, in body movements, and in paper and pencil tasks.

POSITION IN SPACE: An awareness of an object's or person's location, position, and direction in his physical environment.

SPATIAL RELATIONS:	The ability to perceive and relate effectively with one's physical environment.
TIME ORIENTATION:	The ability to judge lapses in time and to be aware of time concepts.
VERBAL EXPRESSION:	The process of or the ability to express oneself with words and/or sentences.
VISUAL ASSOCIATION:	The ability to meaningfully relate one visual stimulus with another on the basis of similarities, differences, or some other relationship.
VISUAL CLOSURE:	The ability to 'see' the whole when only a part is visable.
VISUAL DISCRIMINATION:	The ability to differentiate between objects or persons in one's visual field.
VISUAL FIGURE-GROUND:	The ability to perceive objects in foreground and background and to separate them meaningfully.
VISUAL MEMORY:	The ability to remember visual material which is exposed and then obscured.
VISUAL-MOTOR COORDINATION:	The ability to coordinate fine muscles such as those required in eye-hand tasks.

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